mobile communications system supporting connections of a first type and a second type, the method comprising "retrieving the location service information related to the mobile station; and . . .wherein the retrieving further comprises: determining a preferred type of connection for the retrieving based on the first set of predetermined criteria; and performing, in the retrieving step, at least a first attempt to retrieve the location service information via the preferred type of connection," as recited in independent claim 1 and its dependent claims.

Similarly, the cited prior art fails to teach or suggest the claimed arrangement for supporting location service information related to a mobile station in a mobile communications system supporting circuit-switched communications and packet-switched communications, the arrangement being configured to "determine a preferred type of connection for the retrieving on the basis of a first set of predetermined criteria; and to perform at least a first attempt to retrieve the location service information via the preferred type of connection," as recited in independent claim 16.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The Office Action admitted that Huttunen fails to teach or suggest determining a preferred type of connection for the retrieving based on the first set of predetermined criteria. However, the Office Action asserted that Fried remedies this deficiency of Huttunen by allegedly teaching the claimed determination of a preferred type of connection at col. 7, lines 11 – 20.

Nevertheless, the Office Action's analysis is incorrect. Fried fails to disclose, teach or suggest determining a preferred type of connection for retrieving location service information related to a mobile station based on a first set of predetermined criteria.

The totality of Fried's disclosure merely teaches assignment of micro cells to one layer, i.e., layer 2 and assigning macro cells to a different layer, i.e., layer 3, as a default to be used by mobiles that do not have GPRS functionality. The particular passage of Fried cited by the Office Action in fact only describes a conventional problem that is avoided by Fried's work around solution (explained in the subsequent passage beginning at col. 7, line 21).

The passage cited by the Office Action describes a conventional problem when a class A or B mobile unit 101 is engaged in a circuit switched activity while it is located within the geographical area defined by micro cell C in a conventional system; conventionally, the regular HCS algorithm forces that mobile unit 101 into the micro cell layer (i.e., into a cell that lacks GPRS functionality). As a result, there the conventional art suffered from a

problem in that there was no way to request a handover to a cell with GPRS functionality if that mobile unit 101 wanted to initiate packet transfer while connected to that micro cell C. Thus, the mobile unit 101 was conventionally prohibited from using its GPRS capability while in circuit switched mode. As a result, Fried provides specific tools for avoiding such a problem.

However, the Office Action has wrongly asserted that "the process of forcing of the mobile unit 101 into micro cell layer inherently requires that a preferred type of connection (i.e. the circuit-switch connection) is determined because of the unavailability of the GPRS connection." In the cited passage of Fried, a circuit-switched connection is not a preferred type of connection; rather, the circuit-switched connection is the only available connection. Therefore, there is no need to determine a preferred type of connection when there is only one type of connection to use.

Further, the cited passage of Fried teaches the use of a conventional HCS algorithm that forces the mobile unit 101 into the micro cell layer that lacks GPRS functionality. Contrary to the assertions of the Office Action, one of ordinary skill in the art would have recognized that Fried actually teaches forcing a mobile unit 101 into a non-preferred type of connection, i.e., circuit-switched, because of the unavailability of a GPRS connection. In fact, contrary to the assertions of the Office Action, GPRS type connections appear to be a preferred type of connection; however, when such connections are unavailable, the HCS algorithm forces the mobile unit 101 into a circuit-switched connection, i.e., a non-preferred type of connection. As a result, Fried's teaching of a system that forces a mobile unit into the micro cell layer that lacks GPRS functionality clearly fails to disclose, teach or even suggest any determination of a preferred type of connection.

Thus, the combined teachings of Huttunen and Fried fail to disclose, teach or suggest the claimed invention including determination of a preferred type of connection for the retrieving service information based on a first set of predetermined criteria and performance of at least a first attempt to retrieve the location service information via the preferred type of connection, as recited in the pending claims. Billstrom fails to remedy this deficiency of the other cited prior art; therefore, the combined teachings of the applied references fail to teach or suggest the claimed invention. Accordingly, claims 1-16 are patentable.

NO MOTIVATION TO COMBINE HUTTUNEN AND FRIED

To establish prima facie obviousness of a claimed invention, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. However, the Office Action's asserted motivation to alter the teachings of Huttunen based on the teachings of Fried is insufficient to support a prima facie case of obviousness under 35 U.S.C. 103.

The Office Action asserted that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Fried to Huttunen in order for the mobile to be able to compatibly handoff to the next cell that uses the same protocol." Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. However, Huttunen does not provide any teaching or suggestion of the advantage of such a capability. Moreover, Fried provides no motivation or suggestion for using its technology in a system such as Huttunen's because Fried is directed to technology that utilizes only one type of connection, i.e., circuit-switched connection, when GPRS functionality is not available. Therefore, the motivation to combine the teachings of Huttunen and Fried is deficient.

Further, the Office Action asserted that Fried's "process of forcing of the mobile unit 101 into micro cell layer inherently requires that a preferred type of connection (i.e., the circuit-switch connection) is determined because of the unavailability of the GPRS connection." (emphasis added) As explained above, this analysis is incorrect because there is no "preferred type of connection" in Fried because there is only one type of connection available, i.e., circuit-switched. Nevertheless, Applicant traverses the obviousness rejections because the rejections are based on the incorrectly applied concept of inherency. To establish inherency, the Office must provide extrinsic evidence or rationale that make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). Based on the disclosure of Fried, and for the reasons explained above, one of ordinary skill in the art would not have recognized that Fried teaches a determination of a preferred type connection. Therefore, the motivation to combine the teachings of Huttunen and Fried is deficient.

Moreover, the teachings of Huttunen and Fried cannot be combined as hypothesized by the Office Action because the technology disclosed in the references are incompatible with each other. Specifically, the cited passage of Fried actually teaches away from the Huttunen reference; Fried teaches a system that supports only circuit-switch connections because of the unavailability of the GPRS connection (as admitted by the Office Action). To the contrary, Huttunen relates to a mobile communications system that supports more then one type of connection. The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. Where, as in the present situation, the teachings of the applied references conflict, rationale must be provided that explains why and how one of ordinary skill in the art would and could have combined the teachings of the references. No such rationale exists to support the Office Action's prior art rejections. Thus, the motivation to combine the teachings of Huttunen and Fried is deficient.

All rejections having been addressed, Applicants request issuance of a notice of allowance indicating the allowability of all pending claims. If anything further is necessary to place the application in condition for allowance, Applicants request that the Examiner contact Applicants' undersigned representative at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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